

### **REMARKS**

By this amendment, Applicants have amended Figure 3 to amend the reference characters “42” and “43” used to designate the O rings to --57-- and --58--, respectively, to avoid the use of the same reference character for two different elements. Applicants have amended page 21, lines 8 and 11 of the specification to be consistent with the amended Figure 3. Applicants have also amended page 16, lines 13 and 22, page 20, line 18 of the specification to correct typographical errors. The abstract has been amended to be in proper form.

Applicants have also amended the claims to more clearly define their invention. In particular, the claims have been amended to delete the phrase “acidic solution/alkaline solution” and the phrases “such as” and “and the like.” Claim 1 has been amended to recite that the polluted water is polluted salt water, that the coagulation and separation means is for, inter alia, separating the flocs through at least a filtration process of filtering the flocs by a filter to create the purified salt water, that the floc disintegration means is for generating an acidic solution and an alkaline solution by electrolyzing part of the purified water and for disintegrating the flocs collected as sludge by use of one of the acidic solution and the alkaline solution generated, and that the coagulation regeneration means is for regenerating the coagulant from matter forming the disintegrated flocs, separating the matter to be removed and the regenerated coagulant in the disintegrated flocs and extracting the coagulant. Claim 6 has been amended, to, inter alia, be in independent form. Applicants have canceled claims 2-5, 7 and 9-12 without prejudice or disclaimer. Claims 6 and 13 have been amended to, inter alia, recite the floc disintegration means is for generating an acidic solution and an alkaline solution by electrolyzing

part of the purified water (salt water in claim 6) and for disintegrating the flocs collected as sludge by use of one of the acidic solution and the alkaline solution generated.

In view of the cancellation of claims 9, 10 and 12, reconsideration and withdrawal of the objection to the drawings under 37 CFR 1.83(a) on page 2 of the Office Action are requested.

In view of the foregoing amendments to the abstract, it is submitted the abstract is now in proper form and, therefore, reconsideration and withdrawal of the objection to the specification on page 3 of the Office Action are requested.

In view of the elimination of the phrase “acidic solution/alkaline solution” from the claims, it is submitted the specification provides an enabling disclosure for claims 1-13. Therefore, reconsideration and withdrawal of the rejection of claims 1-13 under 35 U.S.C. 112, first paragraph, are requested.

In view of the foregoing amendments to the claims, it is submitted all of the claims now in the application comply with the requirements of 35 U.S.C. 112, second paragraph. Therefore, reconsideration and withdrawal of the rejection of claims 1-13 under 35 U.S.C. 112, second paragraph, are requested.

Claims 1-13 stand rejected under 35 U.S.C. 102(b) as allegedly being anticipated by “Saho et al.” It is assuming the Examiner is referring to U.S. Patent No. 5,944,986 to Saito et al. Applicants traverse this rejection and request reconsideration thereof.

The present invention relates to a waste water purification system including a waste water purification apparatus that comprises, inter alia, floc disintegration means for generating an acidic solution and an alkaline solution by electrolyzing part

of the purified water and disintegrating the flocs collected as sludge by use of one of the acidic solution and alkaline solution generated. Coagulant regeneration means can then regenerate the coagulant from matter forming the disintegrated flocs. Such is neither disclosed nor suggested by Saho et al.

The Saho et al. patent discloses a magnetic separation apparatus which coagulates substances to be removed in liquid by adding magnetic substances and a flocculant to liquid to be treated and absorbs and captures the thus obtained magnetic aggregates by utilizing magnetic field of magnetic substances which move relative to the liquid to be treated. However, this patent does not disclose a waste water purification system including the presently claimed floc disintegration means for generating an acidic solution and alkaline solution by electrolyzing part of the purified water and disintegrating the flocs collected as sludge by use of one of the acidic solution and the alkaline solution generated. Moreover, there is no apparent reason why one of ordinary skill in the art would have modified the teachings of Saho et al. in order to include such a floc disintegration means. Therefore, the presently claimed invention is patentable over Saho et al.

Claims 1-13 stand rejected under 35 U.S.C. 102(a) as being anticipated by JP-2003-112180. Applicants traverse this rejection and request reconsideration thereof.

JP-2003-112180 also does not disclose generating an acidic solution and alkaline solution by electrolysis of purified water to regenerate the coagulant. Therefore, this document does not disclose the presently claimed floc disintegration means. Nor would there have been any apparent reason to modify the teachings of this document to arrive at the presently claimed invention. Therefore, the presently

claimed invention is patentable over JP-2003-112180.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance of all the claims now in the application are requested.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case 500.44569X00) and please credit any excess fees to such deposit account.

Respectfully submitted,

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